

method, this application gathers load-statistics and availability from the web servers and effectively redirects the requests transparently to the requesting client.

**[114]** The HTTP Redirector can be used in different ways to accomplish its tasks. Its interaction with clients and web servers depends on the place it's located, the port it's using for listening and the links defined on the accessed pages at the web servers. Issues regarding server affinity, client sessions, etc, must be handled by the web administrator.

**[115]** OLE DB-Connection Redirector is a DCOM server packed into a Windows-based executable (OLEDBRedir.EXE). This object is able to keep track of the load-statistic of a set of database servers and to supply a predefined connection string corresponding to the selected database server when requested. This redirector object needs to be alive to monitor the database servers. Therefore, it's necessary that the application be manually started once it's installed. This represents a difference to commonly used automation servers that are automatically activated upon client requests.

**[116]** The redirector deployment and installation process consists of five main stages:

1. Select nodes for redirector installation
2. Specify server general settings for each node
3. Specify file-transfer and remote-execution settings for each node
4. Execute redirector installation procedure
5. Configure the installed redirector

**[117]** The remote installation mechanism is built around a Windows application (RSLOSetup.EXE) and a set of auxiliary files that are actually moved to the target node to perform the installation. From this point another mechanism launches the installation process on the remote node. For UNIX/Linux platforms, SLO will be installed as a daemon. For Windows-based platforms, SLO will be installed as a regular application included in the Startup folder for every user.

1. Selecting nodes for redirector installation

**[118]** Fig. 5A shows the Redirector Deployment and Installation window.

**[119]** By choosing the control "Select Functional Resource Pool" a list of available FRPs appears from the drop-down menu. "Add Redirector" allows the selection of the IP address for a node that is to be designated as a redirector. "Modify Redirector" allows an existing node to be reconfigured so that a different node takes its place as a redirector, or a

different type of redirector (HTTP or DB) is used. “Remove Redirector” removes a server that is highlighted by the user from the Deployment and Installation window.

[120] “Change configuration” allows the installed redirector to be configured for use once nodes have been selected as redirectors and the file transfer and execution is complete. “Install All the Redirectors” is selected after nodes have been chosen for the installation of redirectors. The Install operation takes the user to the Redirectors Remote Setup window where the transfer and execution of redirector files can commence.

## 2. Specifying Server General Settings

[121] Once nodes have been selected for redirector installation, the Redirectors Remote Setup window opens.

[122] Fig. 5B illustrates the Redirectors Remote Setup window.

[123] The Redirectors Remote Setup window is used to define the operating system, file-transfer and remote-execution mechanisms for each node. (Nodes are referred to as Remote Servers in this window.) Selecting different file-transfer and remote-execution mechanisms will activate corresponding tabs which will appear behind a General Settings tab, discussed below. These new tabs can require separate configuration, as discussed in detail in the next section. Changes to general settings are reflected in the list of nodes in the left-hand Remote Server field.

[124] Note that certain restrictions apply during this portion the setup. For example, DCOM is only available to Windows platforms. In some cases, selecting the option “None” for an operation mechanism is useful. For example, if the corresponding files are already placed on a node (due to a previous attempt to install or because common drives are used), only remote execution is required.

## 3. Specifying File-Transfer and Remote-Execution Settings

[125] Depending on the file-transfer and remote-execution mechanisms that were selected in previous steps, one or more new tabs appears behind a General Settings tab. Each tab can be “active” and brought to the forefront by clicking on the tab. Fig. 5C shows the File Transfer Settings for file-transfer protocol (FTP) tab. FTP settings require specifying the FTP username and password (if applicable) and the FTP destination directory. By default an anonymous username and the Home directory are set.

